

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局(43) 国际公布日:
2005年2月10日(10.02.2005)

PCT

(10) 国际公布号:
WO 2005/013527 A1

(51) 国际分类号: H04J-13/02, H04B-1/10

(21) 国际申请号: PCT/CN2004/000881

(22) 国际申请日: 2004年7月29日(29.07.2004)

(25) 申请语言: 中文

(26) 公布语言: 中文

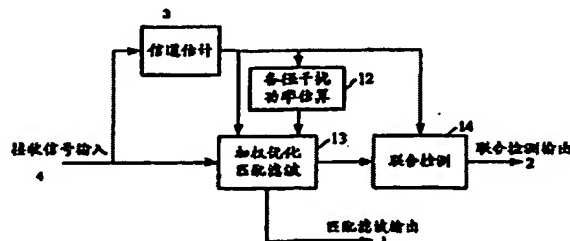
(30) 优先权: 2003年8月5日(05.08.2003) CN
03149765.9(71) 申请人(对除美国以外的所有指定国): 大唐移动通信
设备有限公司(DA TANG MOBILE
COMMUNICATIONS EQUIPMENT CO., LTD.)
[CN/CN]; 中国北京市海淀区学院路40号, Beijing
100083 (CN).

(72) 发明人: 及

(75) 发明人/申请人(仅对美国): 王映民(WANG, Yingmin)
[CN/CN]; 杨贵亮(YANG, Guiliang) [CN/CN]; 孙长泰
(SUN, Changtao) [CN/CN]; 中国北京市海淀区学院
路40号, Beijing 100083 (CN).(74) 代理人: 北京德琦知识产权代理有限公司(DEQI
INTELLECTUAL PROPERTY LAW
CORPORATION); 中国北京市海淀区花园东路10号
高德大厦8层, Beijing 100083 (CN).(81) 指定国(除另有指明, 要求每一种可提供的国家保护):
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW,
BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW(84) 指定国(除另有指明, 要求每一种可提供的地区保护):
ARIPO(BW, GH, GM, KE, LS, MW, MZ, NA, SD,
SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR),
OAPI(BF, BJ, CF, CG, CI, CM, CA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG)本国际公布:
— 包括国际检索报告。所引用双字母代码和其它缩写符号, 请参看刊登在每期
PCT公报期刊起始的“代码及缩写符号简要说明”。

(54) Title: METHOD FOR DETECTING THE ORTHOGONAL CODE CDMA SIGNAL

(54) 发明名称: 正交码CDMA信号检测方法



- 1 MATCHED FILTERING'S OUTPUT
2 COMBINED DETECT'S OUTPUT
3 CHANNEL ESTIMATION
4 RECEIVED SIGNAL'S INPUT
12 EACH MULTIPATH DISTURB POWER'S ESTIMATION
13 WEIGHTING OPTIMIZED MATCHED FILTERING
14 COMBINED DETECTION

(57) Abstract: The present invention discloses a method for detecting the orthogonal code CDMA signal. It mainly includes: estimating the main power of each multipath signal and performing max proportion combination by using the power of each multipath signal's disturber, in order to get optimized matched filtering output; and united detecting the optimized matched filtering output. It may be two implement: when using the detect implement of optimized matched filtering, it only needs to perform the first two main steps; when using the united detecting implement, it needs to perform all the three steps. For the two implements estimate the main power of each multipath signal's disturber, it needs to select the disturb code's channel which join to estimation, namely select all the code's channel of this subzone or the code's channel of this subzone which not perform united detection. As a result of using the orthogonal code characteristic and channel estimation, improve the system's performance by small cost. It can be especially used in the device of orthogonal code CDMA system.

(见续页)